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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,552	10/15/2001	Hank E. Millet	031500487DVA	4193
27572 7590 07/23/2007 HARNESSE, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			EXAMINER FREAY, CHARLES GRANT	
			ART UNIT 3746	PAPER NUMBER
			MAIL DATE 07/23/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/977,552

Applicant(s)

MILLET ET AL.

Examiner

Charles G. Freay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006 and 18 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-22, 26-28, 30, 32-34, 48-50 and 52-67 is/are pending in the application.
- 4a) Of the above claim(s) 50, 53, 54 and 59-64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-22, 26-28, 30, 32-35, 48, 49, 52 and 65-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

This office action is in response to the election of May 18, 2007 and the amendment of November 13, 2006. In making the below rejections and/or rejections the examiner has considered and addressed each of the applicant's arguments.

Election/Restrictions

Applicant's election with traverse of species 1 from Group I, species 6 from Group II, species 29 from Group IV in the reply filed on May 18, 2007 is acknowledged. The traversal is on the ground(s) that the subject matter is related and there would be no undue burden to consider all of the species. This is not found persuasive because the proper traversal of a species is an admission that the species are obvious variants, furthermore the search for the numerous generically disclosed data and variable require extensive search and consideration and would be an undue burden.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 52, 19-22, 26-28, 30, 32-34, 48, 49, 55-59 and 65-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear if a "system master" is required by the claimed invention since this element is only set forth in a functional statement of the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 52, 19, 20, 21, 22, 26-28, 30, 32, 33, 48, 55-58 and 65-67 are rejected under 35 U.S.C. 102(e) as being anticipated by Centers et al (USPN 6,471,485, hereafter Centers).

Centers discloses a compressor system and control system comprising a compressor(s) (1002) and an electronic control system (1004) that is analogous to the claimed control block. The device includes a motor (100) and a shell (not enumerate).

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The control block includes a microprocessor (col. 5 ln. 67) and there is memory (Fig. 5B and the first two full paragraphs of col. 19). The control block (1004) is in communication with the compressor (1002). Multiple compressors (1002) can be controlled at the same time, in which case multiple electronic control systems are linked via network in a peer-to-peer configuration, see abstract. A remote computer used for monitoring, controlling, downloading firmware and software, and communicating compressor operation data constitutes a system master. As set forth in col. 25 line 42 through col. 26 line 27 the system master is in communication with the electronic control system and is operative to receive and send stored compressor configuration information to and from the control block. It is obvious that the system master initializes the compressor system for a specific use and is therefore capable of performing the desired result or method step set forth in claim 32. The random access memory chips (510) are used for storage of operating data, i.e. compressor configuration information, history data, and parameter calculation results, see col. 19 33-37. All operating parameters, service information, shut down records, sensor input information (including temperature and pressure data), are transmitted from the electronic control system (1004) to the system master computer. All of the stored operating parameters of the electronic control system (1004) can be modified by the system master, see col. 15 lines 5-17 which sets forth that the remote controller accesses ***all information of the electronic control system***. It is clear that compressor identification data is stored since Centers at col. 6 line 66 through col. 7 line 8 refer to the manufacturers data for the compressor and col. 7 lines 37 - 45 make reference to the compressor model. Event

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history data is also stored for a variety of conditions (for example col. 7 lines 8-13 or col. 9 lines 57 and 58 where the number of cycles per minute are noted). Cycle time and number data (col. 9 lines 49-65). Application data such as end user pressures and temperatures (col. 14 lines 27-36).

With respect to claims 19 and 20, the control system uses pressure and temperatures sensors, among others, to detect or predict actual shutdown conditions based on the operating state of the compressor (1002). These signals are transmitted to the system master, and are indicative of an operating characteristic of the compressor, see col. 9 lines 21-26.

With respect to claim 27 there is no explicit teaching of the control block/control system (1004), including a pluggable gateway, however as disclosed in col. 13 line 65, and col. 14 lines 24-28, the control system (1004) includes a network interface connection (2013). Among its multiple circuit boards, for connection of the control system and the compressor to the network, the system master and the other compressor. This data interface constitutes a gateway board. Centers includes a plurality of connectors (J1, J2, J8, J11) and microprocessor boards (500), annunciator boards (600) and ARCnet peer-to-peer network communication interface circuits, which constitute communication interfaces or gateways.

With respect to claim 30 note at least the passage previously references at col. 14 line 62 through col. 15 line 32, among other passages.

With respect to claims 52, 55-58, 66 and 67 and the recitation of the types of data (for example compressor identification data) or to recitation of a specific data

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element (for example refrigerant data) as noted above Centers discloses the limitations as claimed. However, it is additionally noted that the reference to the type of data is directed to nonfunctional descriptive material and does not alter how the data is transmitted, received or stored between the control block and the system master. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (fed. Cir. 1994).

From the teachings of Centers one of ordinary skill in the art would understand how to transmit receive and store any type of data between the control block and the system master because the subjective interpretation of the data does not patentably distinguish the claimed invention.

With regards to claims 19, 22, 30 and 52 and the limitations following the recitation of "operable to..." in each of those claims the examiner notes that the limitations following this phrase set forth a limitation or action which the control block or system master must be capable of performing.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 34 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Centers in view of Culp III et al (USPN 5,975,854, hereafter Culp).

As set forth above Centers discloses the invention substantially as claimed but does not disclose a vibration sensor or that the control block is mounted on the shell. Culp teaches of a compressor (10) with a terminal box assembly (28). The box contains a protection module (86), which is analogous to the claimed inventions control block. The protection module, which includes vibration sensors, power supply circuits, and control circuits (Fig.s 4 and 7), is mounted on the compressor shell via the terminal box (col. 6 line 61-62). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the Centers device by mounting the control block and vibration sensors of Culp on the shell in order to integrate the unit and create a smaller footprint.

Response to Arguments

Applicant's arguments filed November 13, 2006 have been fully considered but they are not persuasive. Centers does not disclose a control block that transmits a copy of an image of data to a system master and receives either a new image or a modified copy of the data. The applicant argues that Centers teaches only "fine tuning" and "adjusting" the system and that Centers does not teach of the "wholesale transmission of an image".

The examiner disagrees. As set forth in the above rejection Centers does teach of the control block's ability to transmit and receive data to and from the system master and it further notes that all of the data is made available to an operator at a remote site (i.e. the system master). When Centers speaks of fine tuning or adjusting the system is referring to the action which happens when the data has been reviewed and then the new parameters have been downloaded to the control block. This new data adjust or fine tunes the compressor operation. As set forth in the above rejection Centers teaches of transmitting all data and further is clearly capable of performing such an action.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., wholesale transmission of data) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

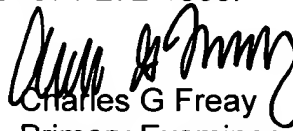
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles G. Freay whose telephone number is 571-272-4827. The examiner can normally be reached on Monday through Friday 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Charles G Freay
Primary Examiner
Art Unit 3746

CGF
July 16, 2007